In the Claims:

Please cancel claims 1-26 and add claims 27-33 as indicated in the listing of claims to follow.

1-26. (Cancelled)

27. (New) A method of manufacturing an interconnect system for conveying a signal between a communication circuit implemented within an integrated circuit and an external node outside the integrated circuit, the method comprising the steps of:

a. forming an electrostatic discharge (ESD) protection device comprising capacitive impedance within the integrated circuit;

b. producing a first conductive path comprising inductive impedance extending from the ESD protection device to the external node;

c. providing a second conductive path comprising inductive impedance extending from the communication circuit to the external node;

d. selecting a characteristic of a frequency response of the interconnect system from the communication device to the external node;

e. evaluating a function of the impedances of the first and second conductive paths, the ESD protection device, and the communication circuit to calculate a magnitude of a capacitance at the external node which will substantially optimize the frequency response characteristic selected at step d; and

f. adjusting the capacitance at the external node to approximate the magnitude calculated at step e.

28. (New) The method in accordance with the claim 27 wherein the function models the interconnect system as a filter formed by interconnected impedances comprising the impedances of the first and second conductive paths, the ESD protection device and the communication circuit and the capacitance at the external node.

29. (New) The method in accordance with claim 28 wherein the frequency response characteristic selected at step d is optimized when the magnitude of the capacitance at the external node causes the interconnect system to operate as a Butterworth filter.

30. (New) The method in accordance with claim 28 wherein the frequency response characteristic selected at step d is optimized when the magnitude of the capacitance at the external node causes the interconnect system to operate as a Chebyshev filter.

31. (New) The method in accordance with claim 27 wherein the frequency characteristic selected at step d comprises a bandwidth of the interconnect system and is optimized when maximized.

32. (New) The method in accordance with claim 27 wherein the frequency characteristic selected at step d comprises a combination of bandwidth and roll-off of the interconnect system.

33. (New) The method in accordance with claim 27

wherein the first conductive path comprises a first bond wire extending from the ESD protection device to the external node; and

wherein the second conductive path comprises a second bond wire extending from the communication circuit to the external node.

34. (New) The method in accordance with claim 27

wherein the first and second conductive paths are implemented by a conductive spring contact comprising:

a tip contacting the external node,

a first conductive leg extending from the ESD protection device to the tip, and

a second conductive leg connected from the communication circuit to the tip.

35. (New) The method in accordance with claim 27

wherein the external node comprises a trace on a printed circuit board, and

wherein the capacitance at the external node is adjusted at step f by forming a via in the printed circuit board, the via being connected to the trace and adding capacitance to the external node such that a total capacitance at the external node approximates the magnitude calculated at step e.